

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection in Mathematics

REPORT

Ainm na scoile / School name	Coláiste Choilm
Seoladh na scoile / School address	Ballincollig Co. Cork
Uimhir rolla / Roll number	71103K

Date of Inspection: 12-03-2020



An Roinn Oideachais
agus Scileanna
Department of
Education and Skills

SUBJECT INSPECTION

Subject Inspections report on the quality of work in individual curriculum areas within a school. They affirm good practice and make recommendations, where appropriate, to aid the further development of the subject in the school.

HOW TO READ THIS REPORT

During this inspection, the inspector evaluated learning and teaching in Mathematics under the following headings:

1. Teaching, learning and assessment
2. Subject provision and whole-school support
3. Planning and preparation

Inspectors describe the quality of each of these areas using the Inspectorate's quality continuum which is shown on the final page of this report. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality of the school's provision in each area.

The board of management of the school was given an opportunity to comment in writing on the findings and recommendations of the report, and the response of the board will be found in the appendix of this report.

CHILD PROTECTION

During the inspection visit, the following checks in relation to the school's child protection procedures were conducted:

1. The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.
2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.
3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.

The school met the requirements in relation to each of the checks above.

SUBJECT INSPECTION

INSPECTION ACTIVITIES

Dates of inspection	10 – 12 March 2020
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during 12 lessons• Examination of students' work• Feedback to principal and relevant staff

School context

Coláiste Choilm is a co-educational school operating under the trusteeship of the Cork Education and Training Board and the Diocese of Cork and Ross. The school comprises an English-medium school and a Gaelcholáiste, with a total enrolment of 1353 students. The school offers the Junior Cycle programme, an optional Transition Year programme, the Leaving Certificate Applied programme and the Leaving Certificate (Established). Mathematics lessons through the medium of Irish were not evaluated during the course of this inspection.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

Findings

- Overall, the quality of teaching, learning, and assessment is very good; on occasion students needed to be given greater opportunity to take responsibility for their own learning.
- There is a very strong relationship between teachers and students which is key to the creation of the positive learning environments observed in all lessons.
- Subject provision and whole school support is of an excellent standard; students are provided with many co-curricular and extra-curricular opportunities to experience Mathematics as a living subject.
- Individual and collaborative planning and preparation are very good.
- The department presents as a community of reflective practitioners which is striving to improve the student experience of Mathematics in a collaborative and systematic manner.

Recommendations

- Building on existing very good practice, the department should articulate and implement common strategies, focused on the development of collaborative skills and verbal reasoning, that would provide students with the opportunity to take greater responsibility for their learning.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING, AND ASSESSMENT

- Overall, the quality of teaching, learning, and assessment is very good, with all lessons of a good standard or higher. A number of excellent lessons were also observed. A very strong relationship between teachers and students characterised by mutual respect was evident in lessons. This was key to the creation and maintenance of the positive learning environments observed in all lessons.
- All lessons were well structured and almost all lessons contained an element of homework correction, in line with the department's policy on homework. It would be beneficial for teachers to consider how the impact of elements of homework correction already included in lessons could be maximised to develop students' peer-assessment and self-assessment skills.
- In the majority of lessons, the tasks provided were interesting, ignited curiosity and were accessible to all abilities of students. This supported an inclusive experience for students. Some tasks were also investigative in nature, encouraging students to pattern spot, to engage in trial and error, and to hypothesise, which is very good practice. In a small number of instances, some students needed to be provided with a greater level of challenge in these tasks; the provision of key learning questions that assist them to develop and articulate their own learning and understanding of the concepts being taught may be useful in this regard.
- In most classes, teachers communicated the learning intention to the students which was achieved in most cases. Students worked very well in lessons, engaged quickly, and produced work that was of a very good standard.
- Learning was of a good or very good quality in all lessons, and particularly in lessons where there was adequate time for students to reflect on their learning. Students, when asked, demonstrated very high standards of prior knowledge and were articulate in verbalising this prior knowledge and in using it to make connections to new concepts when given the opportunity. This practice, of allowing students to verbalise and articulate, should be shared and planned for to a greater extent.
- In all lessons, high expectations around the standard of work expected from students were clearly articulated and demonstrated by teachers. In a small number of lessons, students were facilitated to work effectively at different paces, commensurate with their needs and understanding, and were very well supported by their teacher.
- A very high standard of formative feedback was provided to students in lesson and teachers were acutely aware of the needs of individual students and how best to support them.
- On occasion, students did not have sufficient opportunity to take responsibility for their own learning as the approach taken was too didactic. In these instances, students would have benefited from being allowed to collaborate to identify possible solutions linked to questions posed in the first instance. This could then be followed by the teacher assisting students to formalise this process, rather than the teacher providing the solution or procedure at the outset.
- Teachers used visualisers very effectively to assist students in correcting homework independently and to show expected standards of work presentation. Presentation software was used to best effect when it was formatted to support the structure of the lesson and to assist students in making notes, rather than taking notes. This very good practice in relation to digital technologies should be shared at department level.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision and whole school support are of an excellent standard; ample time for Mathematics is provided in the timetable, especially at senior cycle where fifth and sixth year class groups have six periods of Mathematics per week for all levels. Outcomes of the state examinations compare very favourably with the national norms at all levels.
- Supports for students with special educational needs (SEN) in Mathematics are very well organised. A large proportion of the members of the Mathematics department are involved in this provision and include those who have SEN training. It is very good to note that the school is implementing team-teaching across all year groups, which promotes inclusion. Very positive experiences have been reported by teachers in this regard.
- Members of the department have participated in a wide range of continuous professional development (CPD), evidence of which was observed in lessons.
- Students are provided with a very wide range of co-curricular and extra-curricular opportunities to experience Mathematics as a living subject.

3. PLANNING AND PREPARATION

- Both individual and collaborative planning was of a very high quality. Given the size of the school, the department has two subject coordinators, one for junior cycle and one for senior cycle. Each year group also has a co-ordinating teacher. The subject co-ordinators, supported by other members of the department, are actively engaged in reviewing schemes of work, especially in light of changes to the curriculum with the introduction of the new junior cycle specification.
- The department presents as a community of reflective practitioners which is striving to improve the student experience of Mathematics in a collaborative and systematic manner. Decisions made are underpinned by a sound educational rationale, where the needs of the students are to the fore.
- Building on the very good relationships that already exist between students and teachers and the existing very good collaborative practice within the department, teachers should articulate and implement common strategies that focus on the development of collaborative skills and verbal reasoning skills. This focus would provide students with the opportunity to take greater responsibility for their learning.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, a deputy principal, and subject teachers at the conclusion of the evaluation.

THE INSPECTORATE'S QUALITY CONTINUUM

Inspectors describe the quality of provision in the school using the Inspectorate's quality continuum which is shown below. The quality continuum provides examples of the language used by inspectors when evaluating and describing the of quality the school's provision of each area.

Level	Description	Example of descriptive terms
Very Good	Very good applies where the quality of the areas evaluated is of a very high standard. The very few areas for improvement that exist do not significantly impact on the overall quality of provision. For some schools in this category the quality of what is evaluated is outstanding and provides an example for other schools of exceptionally high standards of provision.	Very good; of a very high quality; very effective practice; highly commendable; very successful; few areas for improvement; notable; of a very high standard. Excellent; outstanding; exceptionally high standard, with very significant strengths; exemplary
Good	Good applies where the strengths in the areas evaluated clearly outweigh the areas in need of improvement. The areas requiring improvement impact on the quality of pupils' learning. The school needs to build on its strengths and take action to address the areas identified as requiring improvement in order to achieve a <i>very good</i> standard.	Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement
Satisfactory	Satisfactory applies where the quality of provision is adequate. The strengths in what is being evaluated just outweigh the shortcomings. While the shortcomings do not have a significant negative impact they constrain the quality of the learning experiences and should be addressed in order to achieve a better standard.	Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas
Fair	Fair applies where, although there are some strengths in the areas evaluated, deficiencies or shortcomings that outweigh those strengths also exist. The school will have to address certain deficiencies without delay in order to ensure that provision is satisfactory or better.	Fair; evident weaknesses that are impacting on pupils' learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve
Weak	Weak applies where there are serious deficiencies in the areas evaluated. Immediate and coordinated whole-school action is required to address the areas of concern. In some cases, the intervention of other agencies may be required to support improvements.	Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Part A Observations on the content of the inspection report

The Board of Management of Coláiste Choilm welcomes and celebrates the Maths Inspection Report. The Board was very pleased that the high standard of teaching, learning and assessment was acknowledged. In particular, the excellence of subject provision and whole school support was recognised. The Board was very pleased that the collaboration of the school community provides our students with opportunities to experience Mathematics as a living Subject.

Part B Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.

The Maths Department will continue its collaborative work on developing ways to provide students with opportunities to take responsibility for their own learning.